

Comparisons of Job Characteristics

Focus Occupation: [Engineering Technicians, Except Drafters, All Other \(17-3029\)](#)

Associated Occupation: [Architectural and Engineering Managers \(11-9041\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation: Architectural and Engineering Managers (11-9041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	23.2	17.6	<<	Extensive education and/or training may be required
Design	5.2	19.0	15.1	<<	Extensive education and/or training may be required
Mathematics	9.2	17.4	16.6	0	Current knowledge level may be sufficient
Computers and Electronics	8.4	16.9	16.2	0	Current knowledge level may be sufficient
Administration and Management	8.4	14.4	8.8	<<	Extensive education and/or training may be required
Physics	4.3	13.0	12.9	0	Current knowledge level may be sufficient
Building and Construction	4.0	10.7	4.5	<<	Extensive education and/or training may be required
Production and Processing	6.0	10.7	13.3	>	Current knowledge level is likely sufficient
Personnel and Human Resources	5.6	10.4	6.2	<<	Extensive education and/or training may be required
Economics and Accounting	4.4	8.1	4.7	<<	Extensive education and/or training may be required
Telecommunications	3.9	7.4	7.4	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 16

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation: Architectural and Engineering Managers (11-9041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
---	---------------------------------	--------------------------------	---------------------------	--	--------------------------------

Operations Analysis	5.0	13.9	7.2	<<	Extensive development of skills in this area may be required
Coordination	9.1	13.3	9.5	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	13.0	11.3	<	A higher skill level may be required
Time Management	8.9	12.8	9.3	<<	Extensive development of skills in this area may be required
Management of Personnel Resources	6.9	12.2	7.3	<<	Extensive development of skills in this area may be required
Mathematics	6.2	11.7	10.8	0	Current skill level may be sufficient
Systems Analysis	6.5	10.7	9.5	<	A higher skill level may be required
Systems Evaluation	6.4	10.7	8.5	<	A higher skill level may be required
Negotiation	6.8	10.2	6.5	<<	Extensive development of skills in this area may be required
Management of Financial Resources	3.3	9.7	4.5	<<	Extensive development of skills in this area may be required
Management of Material Resources	3.7	9.2	5.5	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 88			
Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Architectural and Engineering Managers (11-9041)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	15.2	12.7	<	Some improvement in abilities may be required
Oral Comprehension	12.5	15.0	13.6	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	13.9	12.9	0	Current ability level may be sufficient
Problem Sensitivity	11.1	13.9	12.6	<	Some improvement in abilities may be required
Written Expression	9.8	13.8	11.2	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	13.3	11.2	<	Some improvement in abilities may be required
Information Ordering	9.9	12.0	12.0	0	Current ability level may be sufficient
Category Flexibility	9.0	11.4	11.0	0	Current ability level may be sufficient
Number Facility	6.3	11.2	10.2	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 73

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)
Associated Occupation: Architectural and Engineering Managers (11-9041)

Tools and Technologies	Exclusivity
Autoclave and sterilizer equipment and accessories	12
Business function specific software	1
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Content management software	6
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Finance accounting and enterprise resource planning ERP software	2
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Laboratory enclosures and accessories	17
Laboratory heating and drying equipment	13
Laboratory incubating equipment	20
Network applications software	1
Pressure measuring and control instruments	10
Safety apparel	4
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.